

SEP - 8 2004

BIOLOGICALLY ORIENTED PROSTHESES

**BIOPRO**

Division of Implant Manufacturing & Testing, Inc.

17 Seventeenth St.

Port Huron, MI 48060 (810) 982-7777 Fax (810) 982-7794

**510K Summary of Safety and Effectiveness**

K041936

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**Date Prepared:** Friday, November 21, 2003

**Company name and contact:**

Biopro, Inc.  
17 17<sup>th</sup> Street  
Port Huron, MI 48060  
(P)810-982-7777  
(F)810-982-7794

**Contact Person :** David Mrak, Director of Product Development

**Proprietary Name:** Biopro Sub-talar Implant

**Common Name:** Flatfoot Implant

**Classification name:** Screw, Fixation, Bone (per CFR section 888.3040)

**Predicate Device:**

The Biopro Sub-talar Implant is substantially equivalent in design, composition and function to other orthopedic screws manufactured and approved for market such as: KMI Subtalar MBA System™ K960692 and the Kalix® implant K001231

**Device Description:**

The Biopro Sub-talar Implant is a combination of three components. Two components made of titanium alloy and one component made of UHMW Polyethylene. It will be provided in a range of diameters, including 8mm-12mm in diameter. The device will be cannulated for precise implantation. The device is implanted using a standard 0.125" square driver which is cannulated.

**Intended use:**

The Biopro Subtalar Implant will be used on indications that are common with presently marketed devices. The primary indications for use of the Biopro Subtalar Implant is as a spacer for stabilization of the subtalar joint. It is designed to block the anterior and inferior displacement of the talus, thus allowing normal subtalar joint motion but blocking excessive pronation and the resulting sequela.

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Design Consultant, Charles O. Townley, M.D.

*"Design By Reason"*

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#### **Possible Adverse Effects**

The following are specific adverse effects which should be understood by the surgeon and explained to the patient. These do not include all adverse effects which can occur with surgery in general, but are important considerations particular to metallic internal stabilization devices. General surgical risks should be explained to the patient prior to surgery.

1. Infection
2. Pain discomfort or abnormal sensations due to presence of the implant
3. Metal sensitivity or allergic reaction to a foreign body
4. Migration of the implant loosening of the implant
5. Delayed correction in alignment
6. Decrease in bone density due to stress shielding
7. Bursitis

#### **Packaging:**

Each of the BioPro Subtalar Implants should be received in an intact package. Damaged packages or products should not be used and should be returned to Biopro.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

SEP - 8 2004

Mr. David Mrak  
Director of Product Development  
Biopro, Inc.  
17 Seventeenth Street  
Port Huron, Michigan 48060

Re: K041936

Trade Name: Biopro Subtalar Implant  
Regulation Number: 21 CFR 888.3040  
Regulation Name: Smooth or threaded metallic bone fixation fastener  
Regulatory Class: II  
Product Code: HWC  
Dated: July 12, 2004  
Received: July 28, 2004

Dear Mr. Mrak :

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

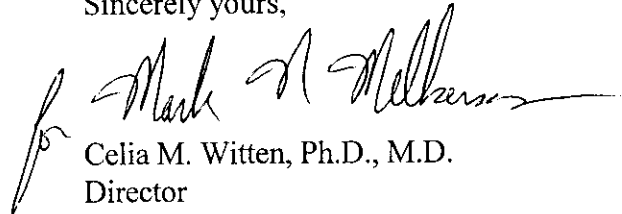
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 – Mr. David Mrak

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", is written over the typed name.

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

K041936

## Indications For Use

The Biopro subtalar implant is indicated for use in the treatment of the hyperpronated foot and stabilization of the subtalar joint. It is designed to block forward, downward and medial displacement of the talus, thus allowing normal subtalar joint motion but blocking excessive pronation and the resulting sequela. Conditions include:

- Flat foot treatment in children and adolescents
- Congenital flat foot
- Unsuccessful long term orthopedic treatment (orthotics)
- Tarsal coalitions
- Painfully flat foot
- Supple deformity in posterior tibial tendon dysfunction
- Paralytic flat foot
- Subtalar instability

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(Division Sign-Off)  
Division of General, Restorative  
And Neurological Devices

510K Number K041936

*for Mark N. Melkerson*  
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(Division Sign-Off)  
Division of General, Restorative,  
and Neurological Devices

510(k) Number K041936

Prescription Use X  
(Per 21 CFR 801.109)

Or

Over-the-Counter\_\_